Amendments to the Drawings:

Replace the drawing sheet containing Figure 1 with the Replacement Sheet submitted herewith.

REMARKS

Claims 30-44 and 46-59 are pending. Claims 30-43 and 51-56, due to a Restriction Requirement, are withdrawn from consideration. Claims 43, 45-50, 58, and 59 are rejected under 35 U.S.C. § 102, claim 57 is rejected under 35 U.S.C. § 103, and claim 58 is rejected under 35 U.S.C. § 112, second paragraph. The abstract and the specification are objected to. Applicants address each basis for rejection and objection as follows.

Claim Amendments

Claim 58 has been amended to replace the term "compound(s)" with the term "molecule(s)". No new matter has been added by this amendment.

Amendments to the Specification

The abstract has been amended to conform to the length requirement and Figure 1 has been amended to properly label panel "C." No new matter has been added by these amendments.

Objection to the drawings

Figure 1 is objected to because panel "C" is not labeled as such. Enclosed herewith is a Replacement Sheet for Figure 1 in which the panels are properly labeled.

This basis for objection may be withdrawn.

Objection to the specification

The specification is objected to because the Abstract of the Disclosure exceeds 150 words. The Abstract of the Disclosure has been amended to contain fewer than 150 words. Applicants submit that the Abstract, as amended, is free of this basis for objection.

Rejection under 35 U.S.C. § 102

Claims 43, 45-50, 58 and 59 are rejected under 35 U.S.C. § 102(e) as being anticipated by Legrain et al. (US 2006/0034860; "Legrain"). In particular, the Office states (pages 4 and 5):

> Legrain et al. teach a method of screening for modulating compounds that inhibit or promote HIV protein-protein interactions ... Legrain et al. focused on 8 different proteins with regard to identifying HIV IN [integrase] cellular partners, of which LEDGF, also known as PSIP2, was shown to localize onto a specific binding site of the IN enzyme. The importance of this association was proven by interfering with LEDGF expression by siRNA ... Therefore, as Legrain et al. taught above, the identified complex can be screened for modulating compounds that inhibit such association, thereby providing potential anti-HIV replication therapies.

Applicants note that the Office's anticipation rejection is based on the assertion that Legrain is available as prior art against the presently claimed invention under 35 U.S.C. § 102(e). Applicants respectfully disagree.

Legrain is the publication of U.S. application serial number 10/853,807, which is a continuation application of international application PCT/EP02/13868. Legrain claims priority from two U.S. provisional applications, 60/333,346, filed November 26, 2001 ("the '346 application") and 60/385,132, filed May 31, 2002 ("the '132 application").

Given the September 26, 2002 and October 22, 2002 priority dates of the present application, Applicants submit that the anticipation rejection over Legrain has been made based on the assumption that Legrain is entitled to one or both of the priority dates claimed, because the May 26, 2004 filing date of Legrain is after both of the present application's priority dates. Applicants, however, for the reasons set forth below, submit that neither the '346 nor the '132 application discloses the presently claimed invention and, therefore, Legrain is not available as prior art under 35 U.S.C. § 102(e) against the present claims.

Claim 44, from which all other rejected claims depend, is directed to a method of screening molecule(s) for their antiviral activity. This method includes the step of exposing the molecules to the protein LEDGF/P75 or a fragment thereof, or a nucleic acid encoding LEDGF/P75 or a fragment thereof and determining the interaction of the molecule(s) with the protein LEDGF/P75 or with the nucleic acid encoding LEDGF/P75.

Applicants note that Legrain's first priority application, the '346 application, in Table 2, lists interactions identified in two-hybrid screens to identify molecules that interact with viral enzymes. Over 80 molecules are identified as interacting with

integrase. In Table 3 the SID® polypeptides (or selected interacting domain polypeptides – defined on page 12, last paragraph) of these interactions are identified. The '346 application simply describes a large number of interacting molecules, one of which is identified as PSIP1 (which includes a portion of the PSIP2 (LEDGF/P75) protein, but the '346 application fails to describe the PSIP2 protein). The '346 application provides no teaching that PSIP1, or any other interacting protein, can be used in a method of screening molecules for their antiviral activity.

Turning to Legrain's second priority application, Applicants note that the '132 application does not disclose PSIP2/LEDGF (or PSIP1), much less its use in a screening method to identify antiviral molecules. As such, neither the '346 nor the '132 application discloses the presently claimed invention.

In contrast, Applicants' priority applications describe methods of using PSIP2/LEDGF (Inip76) to identify antiviral molecules (see, e.g., claim 9 of GB 0222361.8, filed September 26, 2002 and claim 10 of GB 0224539.7, filed October 22, 2002).

For all the above reasons, Applicants submit that Legrain is not available as prior art under 35 U.S.C. § 102(e) against claims 43, 45-50, 58, and 59. This basis for rejection should be withdrawn.

Rejection under 35 U.S.C. § 103

Claim 57 is rejected under 35 U.S.C. § 103 as unpatentable over Legrain in view of Brodin et al. (Biochemistry 41:1529-1539, 2002; "Brodin"). In response, as set forth above, Applicants submit that Legrain is not available as prior art under 35 U.S.C. § 102(e) against the presently claimed invention. Brodin alone fails to teach or suggest use of a LEDGF/P75 protein or nucleic acid. As such, Brodin fails to teach or suggest all elements required by claim 57 and, therefore, cannot render the claimed invention obvious. The rejection of claim 57 under 35 U.S.C. § 103 should be withdrawn.

Rejection under 35 U.S.C. § 112, second paragraph

Claim 58 is rejected under 35 U.S.C. § 112, second paragraph, for insufficient antecedent basis for the term "compound(s)". As noted above, claim 58 has been amended to replace the term "compound(s)" with the term "molecule(s)", which finds antecedent basis in claim 44 from which claim 58 depends. This basis for rejection should be withdrawn.

CONCLUSION

Applicants submit that the application is now in condition for allowance, and this action is hereby respectfully requested.

Enclosed is a Petition to extend the period for replying to the Office Action for three (3) months, to and including November 30, 2007, and a check in payment of the required extension fee.

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date: 30 November 2007

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